# **Fields of Proficiency Testing Notes**

# **Analytes, Acceptance Limits and Reporting Limits**

All tables are available both as a Microsoft Excel (xls) and an Adobe Acrobat Portable Document Format (pdf) file at the TNI website (http://www.nelac-institute.org).

# Drinking Water Fields of Proficiency Testing (FoPT) and Non-Potable Water (NPW) Fields of Proficiency Testing (FoPT)

#### **Accreditation Analytes**

The tables contain a listing of the approved drinking water (potable water) fields and approved wastewater or non-potable water of proficiency testing (FoPT) analytes and acceptance limits for all analytes.

#### **Experimental Analytes**

The purpose of experimental analytes is to gather data in order to develop acceptance criteria so these analytes can be added when these acceptance limit tables are revised in the future. Laboratories accredited or seeking accreditation in the corresponding Fields of Accreditation must participate in proficiency testing study rounds at the required frequency for the Experimental Fields of Proficiency Testing. However, accreditation status will not be based on whether the laboratory received an acceptable or not-acceptable result for the Proficiency Test Sample. Laboratory participation data will be used to determine if these Fields of Proficiency Testing should be moved to the Accreditation Table in the future.

## Solid and Chemical Materials (SCM) Fields of Proficiency Testing (FoPT)

To assure that all laboratories are being evaluated at all times in a fair and consistent manner and that accrediting authorities and PT Providers have sufficient time to implement the changes, the PT Board adopted a single implementation date of July 1, 2007 for these changes. PT studies with a shipment date on or after July 1, 2007 must contain the analytes and be evaluated using the criteria on these tables. Conversely, PT studies with a shipment date prior to July 1, 2007 must be evaluated according to the existing criteria.

#### **Accreditation Analytes**

The attached table contains a listing of the approved Solid and Chemical Materials fields of proficiency testing (FoPT) analytes and acceptance limits. The list contains revised acceptance criteria for some analytes and some new analytes with corresponding acceptance limits.

The following is a summary of the major changes to the solid and chemical materials accreditation table.

- 1. Solids and Chemical Materials FoPT Accreditation table now includes new accreditation analytes, revised and new concentration ranges and revised and new acceptance criteria.
- 2. The Low-Level and Mid-Level Volatile Organics have been separated into separate concentration ranges and acceptance criteria. This separation in concentration levels reflects different technologies for analysis of soil samples. Also added is a separate grouping for Low-Level Polynuclear Aromatic Hydrocarbons (PAH) in addition to the usual BNA-Level PAH's.
- 3. A footnote was added on the Accreditation Table regarding PTRLs. Previously for the SCM tables, no guidance or explanation was given for either laboratories or PT providers on how to report or grade analytes that were absent ("zero" concentration) in a Proficiency Test Sample. An explanation of the meaning of PTRLs has been added to this table to be consistent with the other Field of Proficiency Testing tables.
- 4. Acceptance criteria by analytical technology for the following analytes on the Accreditation FoPT Table have been added (see footnotes):
  - a. Diesel Range Organics (DRO) per solvent extraction followed by chromatographic analysis. DRO is defined as the carbon range between C10 and C28.
  - b. Gasoline Range Organics (GRO) per purge-and-trap extraction followed by chromatographic analysis. GRO is defined as the carbon range between C5 and C10.
  - c. n-Hexane Extractable Material (HEM) per solvent extraction followed by gravimetric or infrared spectrometric analysis (Oil & Grease).
  - d. Non-Polar Extractable Material per solvent extraction and Silica Gel Treated (SGT) followed by gravimetric or infrared spectrometric analysis (Total Petroleum Hydrocarbons).

## **Experimental Analytes**

The PT Board also adopted and is posting a list of experimental analytes for Solid and Chemical Materials. The purpose of experimental analytes is to gather data in order to develop acceptance criteria so these analytes can be added when these acceptance limit tables are revised in the future. Laboratories accredited or seeking accreditation in the corresponding Fields of Accreditation must participate in proficiency testing study rounds at the required frequency for the Experimental Fields of Proficiency Testing after July 1, 2007. However, accreditation status will not be based on whether the laboratory received an acceptable or not-acceptable result for the Proficiency Test Sample. Laboratory participation data will be used to determine if these Fields of Proficiency Testing should be moved to the Accreditation Table in the future.